

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-16. (cancelled)

17. (currently amended) A system for managing communications between a mobile platform operating within a pre-defined terrestrial, geographic region, in a manner to minimize interruptions to a communications link established between the mobile platform and a communications center at the geographic region, the system comprising:

a communications component disposed on said mobile platform, said communications component including a system for providing real time location information;

a ground based component including:

a plurality of directional antenna stations disposed at pre-determined locations about said geographic region for ~~providing transmitting directional~~ radio frequency (RF) ~~communications with said mobile platform at any location~~ beacon signals in differing directions from a plurality of locations within said geographic region, said mobile platform using said beacon signals to establish a communications link with one of said directional antennas;

a control system in communication with each of said antenna stations; and

wherein said control system uses said location information and a direction of travel of said mobile platform to determine which of said antenna stations to communicate with, and to instruct said mobile platform to switch from one of said antenna stations to another in a manner to minimize a number of changes between said antenna stations while said mobile platform travels within said geographic region, and while maintaining an optimal RF communications link between said mobile platform and said ground component.

18. (original) The system of claim 17, wherein said mobile platform includes first and second RF antennas each operating at a different frequency.

19. (original) The system of claim 17, wherein each said antenna station includes first and second antennas operating at different frequencies.

20. (original) The system of claim 17, wherein the control system uses information concerning a loading of at least a pair of said antenna stations in determining which said antenna stations to instruct said mobile platform to use.

21. (original) The system of claim 17, wherein said location information comprises real-time information obtained from a Global Positioning Satellite system.

22. (original) The system of claim 17, wherein a speed of travel of the mobile platform is used by the control system to select and switch between ones of said antenna stations.

23. (currently amended) The system of claim 17, wherein at ~~[[lease]]~~ least one of said antenna stations is used to inform said mobile platform as to which specific one of said antenna stations to communicate to switch to using.

24. (currently amended) The system of claim 17, wherein each said antenna station further includes: ~~a directional antenna~~; an omni directional antenna; and

wherein said directional antennas of said antenna stations are directed such that an associated antenna beam of each is directed away from one another.

25. (cancelled)

26. (currently amended) A method for managing communications within a pre-defined geographic area between a mobile platform operating within the geographic area and a control system, comprising:

a) using a plurality of ground-based, directional antennas, each being disposed at an associated antenna stations station, and each disposed at a fixed locations location within the geographic area, to each transmit ~~an identification a~~ directional beam signal;

b) using a communications component located on said mobile platform to receive said beacon signals and to select an initial one of said antenna stations to establish a communications link with said control system as said mobile platform operates within said geographic region;

c) using said control system to communicate with each of said antenna stations and to monitor at least ~~[[one]]~~ a plurality of speed of travel, ~~[[and]]~~ direction of travel of said mobile platform, and loading of each of said directional antennas within said geographic region;

d) using said control system to analyze information obtained at step c) to determine when said mobile platform should switch from communicating with said initial one of said antenna stations to a different one of said antenna stations to maintain an optimal communications link while moving within said geographic region; and

e) instructing said communications component, in real time, as to which one of said antenna stations to use to maintain said communications link in a manner which reduces a frequency with which said communications component is required to switch from one said antenna system to another.

27. (original) The method of claim 26, wherein said communications component continuously supplies location information obtained from a Global Positioning Satellite system to said control system via said antenna stations.

28. (original) The method of claim 26, wherein said control system uses multi-iteration to periodically determine at least an approximate direction of travel of said mobile platform.

29-30. (cancelled)

31. (currently amended) The method of claim 26, wherein using said antenna stations further comprises using at least one directional antenna and one ~~omni~~ directional omni-directional antenna.

32. (original) The method of claim 26, further comprising using information pertaining to a loading of at least a pair of said antenna stations in determining which one of said antenna stations said communications component is to be instructed to use.

33-34. (cancelled)